

Appl. No. 10/648,900
Amendment dated March 18, 2004
Reply to Office Action of March 4, 2004

Amendments to the Specification:

Please replace the paragraph beginning on page 1, line 24 with the following amended paragraph:

Specific details of such known prior art skewed roller brake assemblies are representatively shown and described in U.S. Pats. No. 4,850,258 4,850,458 and 6,109,415, the aggregate disclosures of which are hereby incorporated by reference. In some applications of skewed roller brake elements, it is desirable to produce one value of braking coefficient in one direction of relative rotation, and another value (possibly approaching zero) in the opposite direction. This could be achieved by means of different braking elements, coupled through over-running clutches or opposed ratchets, such as shown in the aforesaid U.S. Pat. No. 6,109,415.

Please replace the paragraph beginning on page 2, line 8 with the following amended paragraph:

The present invention provides an improvement in a skewed roller brake assembly (20). Such a brake assembly has a main axis of rotation (x-x), has a first plate (21) adapted to be rotated about the main axis, has a second plate (22) adapted to be rotated relative to the first plate about the main axis, and has an intermediate plate (23) positioned between the first and second plates and also arranged to rotate about the main axis. The first and second plates are adapted to be axially loaded by a braking force $F-F$ with respect to one another. The intermediate plate has a slot (24) (25) bounded by a first wall (26) that is arranged at a first angle θ_1 with respect to a radius from the main axis, and has a cylindrical roller (25) arranged in the slot for

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rolling engagement with the first and second plates about the axis ($y-y$) of the roller such that the roller axis is parallel to the first wall when the first and second plates are rotated relative to one another in one angular direction. The improvement broadly comprises: the slot having a second wall (28) arranged at a second angle (θ_2) with respect to a radius from the main axis such that the roller axis is substantially parallel to the second wall when the first and second plates are rotated relative to one another in the opposite angular direction; whereby the resistance to relative rotation between the first and second plates for the same value of axially loading may differ as a function of the direction of relative angular rotation between the first and second plates.